



Sunoco Logistics

Sunoco Pipeline L.P.
One Fluor Daniel Drive
Building A, Level 3
Sugar Land, TX 77478

July 11, 2016

VIA: Electronic Mail and FedEx

Mr. Rod Seeley
Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
8701 South Gessner Rd.
Suite 1110
Houston, TX 77074

Re: Notice of Amendment CPF No. 4-2016-5021M

Dear Mr. Seeley:

The Notice of Amendment (NOA) referenced above and dated June 2, 2016 was received by Sunoco Pipeline L.P. (SPLP) on June 6, 2016. This NOA provided SPLP 30 days to respond. On June 9, 2016 SPLP requested an extension of time to respond. PHMSA granted an extension until July 11, 2016 to respond. Attached to this letter is the SPLP response.

Should you have any questions or require further information, please contact Todd Nardozzi of our Sugar Land, TX office at 281-637-6576 or via email at tgnardozzi@sunocologistics.com

Sincerely,

David R. Chalson
Sr. VP - Operations
Sunoco Pipeline L.P.

Attachment



1. §195.402 Procedural manual for operations, maintenance, and emergencies.

(c) *Maintenance and normal operations.* The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:

(3) Operating, maintaining, and repairing the pipeline system in accordance with each of the requirements of this subpart and subpart H of this part.

§195.432 Inspection of in-service breakout tanks¹

(a) Except for breakout tanks inspected under paragraphs (b) and (c) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, inspect each in-service breakout tank.

(b) Each operator must inspect the physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to API Standard 653 (incorporated by reference, see § 195.3). However, if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under § 195.402(c)(3).

¹Since the time of this inspection, 49 C.F.R. § 195.432 was amended and took effect in March 2015. The current regulation is cited below.

§ 195.432 Inspection of in-service breakout tanks.

(a) ...

(b) Each operator must inspect the physical integrity of in-service atmospheric and low-pressure steel above-ground breakout tanks according to API Std 653 (except section 6.4.3, Alternative Internal Inspection Interval) (incorporated by reference, see § 195.3). However, if structural conditions prevent access to the tank bottom, its integrity may be assessed according to a plan included in the operations and maintenance manual under §195.402(c)(3). The risk-based internal inspection procedures in API Std 653, section 6.4.3 cannot be used to determine the internal inspection interval.

(1) Operators who established internal inspection intervals based on risk-based inspection procedures prior to March 6, 2015, must re-establish internal inspection intervals based on API Std 653, section 6.4.2 (incorporated by reference, see § 195.3).

(i) If the internal inspection interval was determined by the prior risk-based inspection procedure using API Std 653, section 6.4.3 and the resulting calculation exceeded 20 years, and it has been more than 20 years since an internal inspection was performed, the operator must complete a new internal inspection in accordance with § 195.432(b)(1) by January 5, 2017 .

(ii) If the internal inspection interval was determined by the prior risk-based inspection procedure using API Std 653, section 6.4.3 and the resulting calculation was less than or equal to 20 years, and the time since the most recent internal inspection exceeds the re-established inspection interval in accordance with §I 95.432(b)(1), the operator must complete a new internal inspection by January 5, 2017.

(iii) If the internal inspection interval was not based upon current engineering and operational information (i.e., actual corrosion rate of floor plates, actual remaining thickness of the floor plates, etc.), the operator must complete a new internal inspection by January 5, 2017, and re-establish a new internal inspection interval in accordance with §195.432(b)(1).



(2) [Reserved]

(c) Each operator must inspect the physical integrity of in-service steel aboveground breakout tanks built to APT Std 2510 (incorporated by reference, see § 195.3) according to section 6 of API Std 510 (incorporated by reference, see § 195.3).

Section 195.432 does not allow the use of the procedures set forth in API Standard 653, section 6.4.3, Alternative Internal Inspection Interval. Forthcoming inspections of the procedures will be based on the current regulation, cited above.

(c) Each operator shall inspect the physical integrity of in-service steel aboveground breakout tanks built to API Standard 2510 according to section 6 of API 510.

(d) The intervals of inspection specified by documents referenced in paragraphs (b) and (c) of this section begin on May 3, 1999, or on the operator's last recorded date of the inspection, whichever is earlier.

Sunoco's DOT 195 Maintenance Manual Subpart F: Operation and Maintenance Section 195.432 Inspection of In-Service Breakout Tanks procedure does not adequately described the time intervals for performing out of service internal inspections. Sunoco's procedure only states the out of service inspections shall be determined according to API 653 Section 6.4. Sunoco must amend their procedure to describe in detail, and specify the time intervals for performing out of service internal inspections and not just state they will follow API 653.

Sunoco's procedure also does not adequately address §195.432(b) which states if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under § 195 .402(c)(3). Sunoco needs to address bottom integrity inspection plan for their tanks that have concrete liners. In the last five years, Sunoco has needed to replace five floors on tanks that had concrete liners due to internal and external corrosion on the steel bottoms. This demonstrates tanks with concrete liners are susceptible to internal and external corrosion and need to have internal inspection intervals of 10 years.

SPLP Response

SPLP will revise the DOT Maintenance Manual procedure 195.432 to include additional details regarding the time intervals for performing out of service inspections.

The SPLP DOT Maintenance Manual procedure 195.432, (3)(V) currently includes the following regarding inspection of tank bottoms that structural conditions prevent access to:

“Aboveground breakout tanks with concrete floors and tub sealing rings shall be inspected in accordance API Standard 653, except for the floors, since API does not address concrete floors. This type of breakout tank shall have the concrete floor inspected for cracks or breaks. If minor cracks are found, they shall be repaired and a thick film epoxy lining shall be applied to the floor in accordance with the current incorporated by reference edition of API Recommended Practice 652. The tub sealing ring located between the concrete floor and the wall of the tank shall be replaced with a new sealing ring. The sealing ring shall be compatible with the product which is stored in the tank. If the concrete floor is found to have large cracks or breaks, the concrete floor shall be removed and a new steel bottom shall be installed. Corrective actions should be noted on the Sunoco Tank Maintenance Report.”

SPLP will review this section and revise and expand the details of this program as necessary. This development will require considerable effort and review by our Tank Integrity group. We thereby plan to have the DOT 195 Maintenance Manual procedure 195.432 revised and implemented by December 2, 2016. SPLP will also submit the required documentation to the PHMSA SW Region Director for review not later than this date.

2. §195.402 Procedural manual for operations, maintenance, and emergencies.

(c) (3) see above.

195.577 What must I do to alleviate interference currents.

(a) For pipelines exposed to stray currents, you must have a program to identify, test for, and minimize the detrimental effects of such currents.

(b) You must design and install each impressed current or galvanic anode system to minimize any adverse effects on existing adjacent metallic structures.

Sunoco's 195 Maintenance Manual, Subpart H (Corrosion Control), Section 195.577 (Interference Currents), revised on 10-31 -2010 is inadequate that it does not establish a program to identify, test for, and minimize the detrimental effects of stray currents. Sunoco' s 195 Maintenance Manual, Subpart H (Corrosion Control), Section 195.577 (Interference Currents), Paragraph SPLP Requirement I Process Description (3.b.) states:

"Unexpected and/or unusual variations in cathodic protection measurements encountered during normal testing will be evaluated to determine whether these test results may be caused by stray current interference. SP LP will work through corrosion coordinating committees or by direct contact with area utilities or other pipeline operators to resolve whether interference may be the cause of the unexpected and/or unusual test results and to resolve the stray current interference condition, if it exists ".

According to the aforementioned paragraph, Sunoco did not clarify the "Unexpected and/or unusual variations in cathodic protection measurements" in their manual. PHMSA notes that there must be a numerical threshold of Unexpected and/or unusual variations in cathodic protection measurements which triggers Sunoco to determine whether the cathodic protection measurements encountered by stray currents or not.

Sunoco must revise its procedure to reflect the numerical value of Unexpected and/or unusual variations in cathodic protection measurements.



SPLP Response

SPLP will revise the DOT 195 Maintenance Manual procedure 195.577 to provide additional guidance on the overall interference program and reference a new corrosion control technical Guideline, CORR-TG-0202 'Stray Current Testing and Mitigation Guideline'. The guideline will provide examples of interference, both static and dynamic, techniques to recognize interference, test methods to evaluate the level of interference and methods to mitigate and/or monitor. Interference is a complicated issue and setting a specific numeric value that defines interference threshold is not practical. The guideline will provide guidance to the tester on appropriate data collection and through analysis of the data and discussion with more experienced personnel, allow development of a mitigation plan or monitoring procedure.

The guideline development will require considerable effort and review by our Corrosion Control group. We thereby plan to have the required guideline developed and the DOT 195 Maintenance Manual procedure 195.577 revised and implemented by December 2, 2016. SPLP will also submit the required documentation to the PHMSA SW Region Director for review not later than this date.

3. 195.402 Procedural manual for operations, maintenance, and emergencies.

(c) (3) see above.

195.573 What must I do to monitor external corrosion control?

(c) Breakout tanks. You must inspect each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that operation and maintenance of the system are in accordance with API Recommended Practice 651. However, this inspection is not required if you note in the corrosion control procedures established under § 195.402(c)(3) why compliance with all or certain operation and maintenance provisions of API Recommended Practice 651 is not necessary for the safety of the tank.

Sunoco's 195 Maintenance Manual, Subpart H Corrosion Control, Section 195.573 Monitoring External Corrosion Control, is inadequate and lacks detail to inspect each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that operation and maintenance of the system are in accordance with API Recommended Practice 651. The procedure also references the regulation and API 651 but does not give details and guidance on inspecting and monitoring cathodic protection for breakout tanks.

Sunoco must revise its procedure to give better details and guidance on cathodic protection control for breakout tanks.

SPLP Response

The current SPLP DOT 195 Maintenance Manual procedure 195.573 defines that rectifier output parameters are to be monitored and documented on a bi-monthly basis and that tank to soil potentials are to be used to evaluate the cathodic protection levels on an annual basis. SPLP typically utilizes perimeter reference placement to evaluate cathodic protection levels as a standard. However, all new tanks and retrofitted tanks have under tank reference electrodes installed and typically a perforated reference tube that can provide for under tank-to-soil measurements. There are issues with the permanent reference electrodes and their longevity and as such these installations have proven to be unreliable over time. There have also been issues with the perforated reference tubes filling with the sand foundation material making measurements within these tubes unreliable. SPLP has begun installation of Electrical Resistance (ER) probes under new tanks and where tank floor retrofits allow. These installations have proven to be more reliable in evaluating the cathodic protection effectiveness than some of the other testing installations. The SPLP DOT 195 Maintenance Manual procedure 195.573 will be revised to include a general discussion of the cathodic protection at above grade storage tanks testing procedure. SPLP will generate a corrosion control technical guideline, CORR-TG-0203 'Above Grade Tank Corrosion Control Testing Guideline', that will provide a more detailed presentation of the cathodic protection monitoring procedures that are available given the various configurations of the existing tankage and test access. The new technical guideline will be referenced in the maintenance manual.

The guideline development will require considerable effort and review by our Corrosion Control group. We thereby plan to have the required guideline developed and the DOT 195 Maintenance Manual procedure 195.577 revised and implemented by December 2, 2016. SPLP will also submit the required documentation to the PHMSA SW Region Director for review not later than this date.